

NOV 26 2008

See attached form for additional information.

Interagency Report Control No.:

UNITED STATES DEPARTMENT OF AGRICULTURE  
ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. CERTIFICATE NUMBER: 54-R-0001  
CUSTOMER NUMBER: 276

FORM APPROVED  
OMB NO. 0579-0036

**ANNUAL REPORT OF RESEARCH FACILITY**  
( TYPE OR PRINT )

West Virginia University  
Room 154-G Health Science Ctr  
Po Box 9029  
Morgantown, WV 26506

Telephone: (304) -293-2721

3. REPORTING FACILITY ( List all locations where animals were housed or used in actual research, testing, or experimentation, or held for these purposes. Attach additional sheets if necessary )

FACILITY LOCATIONS ( Sites ) - See Attached Listing

**REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY ( Attach additional sheets if necessary or use APHIS Form 7023A )**

A. Animals Covered By The Animal Welfare Regulations	B. Number of animal being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals an for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for wh the use of appropriate anesthetic, analgesic, or tranquiliz drugs would have adversely affected the procedures, res or interpretation of the teaching, research, experiments, surgery, or tests. ( An explanation of the procedures producing pain or distress in these animals and the reas such drugs were not used must be attached to this report	F. TOTAL NUMBER OF ANIMALS  ( COLUMNS C + D + E )
4. Dogs	0	0	0	0	0
5. Cats	0	0	20	0	20
6. Guinea Pigs	0	0	0	0	0
7. Hamsters	0	0	19	0	19
8. Rabbits	0	21	112	58	191
9. Non-human Primates	0	0	6	0	6
10. Sheep	0	0	108	0	108
11. Pigs	0	0	0	0	0
12. Other Farm Animals	0	0	0	0	0
13. Other Animals					
Gerbil	0	0	8	0	8
Ferret	0	22	0	0	22

**ASSURANCE STATEMENTS**

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual rese teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and ap Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary inc brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

**CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL**  
( Chief Executive Officer or Legally Responsible Institutional Official )

SK

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL ( Type or Print )

DATE SIGNED

(b)(6),(b)(7)(c)

11/11/08

API

solely.)

(b)(6),(b)(7)(c)

NP

**Column E Explanation**

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Names, addresses, protocols, veterinary care programs, and the like, are not required as part of an explanation. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

1. Registration Number: 54-R-001
2. Number 58 of animals used in this study.
3. Species (common name) Rabbit of animals used in the study.
4. Explain the procedure producing pain and/or distress.

Please see attached sheets (2 sheets).

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below)

Drugs will taint results because it is the inflammation effects that are being studied. Extreme weight changes and excessive dehydration may warrant premature euthanasia. Animals will need to be watered more than usual. We will follow OLAR SOP's for rabbits in pain.

6. What, if any, federal regulations require this procedure? Cite the agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g., APHIS, 9 CFR 113.102):

Agency \_\_\_\_\_ CFR \_\_\_\_\_

## 4. Explain the procedure producing pain and/or distress.

<p><b>(240 animals) Normal animals (2.5-2.7kg)</b>  30 animals/drug x 8 drugs  ↓  sham inoculated  (within 5-7 days of receiving animals)  ↓  inject with drug (if applicable,  approx 50% of normals animals)  or sham injected with vehicle  within 3 days of sham inoculation;  once per day for two days  prior to euthanasia  ↓  sacrificed  ↓  villus and crypt cells isolated  ↓  nutrient and electrolyte transport studies performed</p>	<p><b>(240 animals) Inflamed Animals (1.9-2.3kg)</b>  30 animals/drug x 8 drugs  ↓  inoculate with E. magna  (within 5-7 days of receiving animals)  ↓  incubate 14 days  ↓  If applicable, once per day on days 12 and 13  or sham injected with vehicle  ↓  treated with drugs (if applicable, approx 50% of  inflamed animals)  ↓  sacrificed  ↓  villus and crypt cells isolated  ↓  nutrient and electrolyte transport studies performed</p>
<p><b>**To evaluate the full extent of the effects of the drug normal animals will be sham injected, normal animals will be injected with drug, inflamed animals will be sham injected and inflamed animals will be injected with drug to determine effects of chronic inflammation on nutrient and electrolyte transport. .</b></p>	
<p><b>B. What (estimated) percentage of animals will be unusable due to unintended mortality or morbidity?</b>  1%</p>	
<p><b>C. Describe any clinical problems that may arise from experimental manipulation.</b>  None</p>	

**If the protocol involves only the observation of animals, stop here.**

Drugs that will be used in the study include:

	<u>Action</u>	<u>Vehicle</u>
Piroxycam (5mg/kg)	COX1, COX2 Inhibitor	Aqueous; pH 5.0
NS398 (0.1mg/kg)	COX2 Inhibitor	Aqueous
MK886 (1mg/kg)	5-Lipoxygenase Inhibitor	Aqueous; 10% Methyl Cellulose
MK556 (0.5-5mgs/kg)	LTD4 Inhibitor	Aqueous; 10% Methyl Cellulose
Methyl prednisolone	anti inflammatory	Aqueous
L-NAME	Nitric oxide inhibitor	Aqueous
L-NIL	Nitric oxide inhibitor	Aqueous
ATMK	Arachidonic acid inhibitor	Aqueous

## 4. (Continued)

## 15. Nonsurgical Experimental (or Teaching) Procedures or Conditions

## A. Details of experimental (or teaching) procedures, including frequency of treatments per animal.

1mg of ketamine is administered. Wait 5min.

Place sterile, lubricated intragastric tube into stomach.

Place ~ 20,000 Coccidia (E. Magna) into stomach through tube and wash with several mls of sterile water.

## B. If anesthetics, analgesics, tranquilizers, and /or experimental materials will be used during nonsurgical procedures, provide the following:

	Agent	Dose (mg/kg)	Route	Frequency
Anesthetics	Ketamine	40mg/kg	IM(hip)	Once
Analgesics				
Tranquilizers				
Experimental materials				

## C. Methods that will be used to detect and evaluate pain and distress in animals and any steps planned to avoid or minimize pain or distress to animals, including the criteria used to determine when animals should be euthanized, if appropriate:

Drugs will taint results because it is the inflammation effects on the animals that are being studied. Extreme weight changes and excessive dehydration may warrant premature euthanasia. Animals will need to be watered more than usual. We will follow OLAR SOPs for rabbits in pain.